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JUL 02 2007

Application No.: 10/563,448

Docket No.: 4590-463

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings are a copy of the original drawings as filed January 4, 2006.

Attachment: 3 sheets

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Application No.: 10/563,448Docket No.: 4590-463**REMARKS**

Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 11-20 remain pending in the application.

The Examiner has objected that the drawings seem to be missing. Applicant understands from review of the USPTO website and the Official Filing Receipt dated March 28, 2006, that the drawings were filed with the USPTO on January 4, 2006. Applicant has attached a copy of the drawings as filed for the Examiner's convenience.

Claims 11 to 20 are rejected under 35 USC §103(a) as being unpatentable over Muhs et al in view of Jarder et al.. Applicant respectfully traverses this rejection. In particular, the Examiner has argued that it would be obvious to substitute an electromagnetic loop sensor described in Jarder et al for the fiber-optic pressure sensor described in Muhs et al, to produce the claimed invention.

Muhs et al describes apparatus for weighing a vehicle in motion, in which weight is measured based upon the deformation of a network of optical fibers of a fiber-optic pressure sensor as a vehicle passes over the optical fibers.

In contrast, the claimed invention requires:- A) an electromagnetic loop designed to radiate an electromagnetic field, B) a conducting cover forming an interface between a surface on which pressure is intended to be applied and the electromagnetic loop, and C) the interface stopping the electromagnetic field radiated by the loop. None of those features is disclosed or suggested in Muhs et al.

By providing the electromagnetic loop and the conducting cover the claimed invention providing a particularly simple apparatus in which the passage of a vehicle over the apparatus causes a change in response signal from the electromagnetic loop.

The further claimed feature that the conducting cover forms an interface that stops the electromagnetic field radiated by the loop provides the very important advantage that the electromagnetic loop may be electromagnetically isolated from any

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metal mass (such as a vehicle) on the other side of the cover (see, for instance page 4, paragraph 4 of the application). Thus, the response signal delivered by the sensor does not depend significantly on the electromagnetic properties of vehicles passing over the sensor, but only upon the weight and speed of the vehicles, enabling accurate determination of the weight of the vehicles from the response signals from the electromagnetic loop.

Turning to Jarder et al, that document makes no mention of apparatus for measuring the weight of vehicles but does describe, in relation to Figure 4, a pressure-sensitive mat in which plates 42' and 42'' are provided at each side of a conducting loop 40. The mat is intended for use, for instance, in the automatic opening of doors, the starting of escalators or as an alarm transmitter (see column 2, lines 64 to 66).

The Examiner has argued that the pressure-sensitive mat of Jarder et al is functionally equivalent to the fiber-optic pressure sensor of Muhs et al, and that it would have been obvious to substitute the pressure-sensitive mat for the fiber-optic pressure sensor and thereby to produce the claimed invention.

However, Muhs et al provides no disclosure of the claimed features of a conducting cover that forms an interface that stops the electromagnetic field radiated by the electromagnetic loop. If the pressure-sensitive mat described in Muhs et al were to be substituted for the fiber-optic pressure sensor of Muhs et al, the electromagnetic field generated by the conducting loop 40 would not be stopped by the pressure sensitive mat and would interact with any vehicle passing over the apparatus. Thus any response signal from the electromagnetic loop would be dominated by electromagnetic effects due to the metal mass of vehicles passing over the sensor rather than due to the weight of the vehicles. Therefore, the resulting system would, in practice, be inoperable for accurate measurement of weight and the pressure-sensitive mat of Muhs et al cannot, in the context of a dynamic weighing system, be considered to be functionally equivalent to the fiber-optic pressure sensor of Jarder et al. The combination of the teachings of the two documents would not lead to the claimed invention.

There is no suggestion in either Muhs et al or Jader et al of a system in which a conducting cover forming an interface is provided that stops an electromagnetic field

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radiated by an electromagnetic loop, the interface being between a surface on which pressure is intended to be applied and the electromagnetic loop. Thus the combination of Muhs et al and Jader et al does not teach, or suggest, the system as claimed and the rejection should be withdrawn.

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.


Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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